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(54) Title: SECRETED FACTORS

Regulated expression of Full-length novel clones

Seq ID	Clone ID	PCT	Seq	Kidney				Heart				Spt
				Hyp	2w	4w	12w	Hyp	2w	4w	12w	
1	P00184_D11	—	—	—	—	—	—	—	—	—	—	—
2	P00185_D11	—	—	—	—	—	—	—	—	—	—	—
3	P00186_D12	—	—	—	—	—	—	—	—	—	—	—
4	P00188_E01	—	—	—	—	—	—	—	—	—	—	—
5	P00194_G01	—	—	—	—	—	—	—	—	—	—	—
6	P00194_G05	—	—	—	—	—	—	—	—	—	—	—
7	P00194_H10	—	—	—	—	—	—	—	—	—	—	—
8	P00199_D08	—	—	—	—	—	—	—	—	—	—	—
9	P00203_D04	—	—	—	—	—	—	—	—	—	—	—
10	P00203_D06	—	—	—	—	—	—	—	—	—	—	—
11	P00209_F06	—	—	—	—	—	—	—	—	—	—	—
12	P00219_D02	—	—	—	—	—	—	—	—	—	—	—
13	P00219_F06	—	—	—	—	—	—	—	—	—	—	—
14	P00220_H05	—	—	—	—	—	—	—	—	—	—	—
15	P00222_G03	—	—	—	—	—	—	—	—	—	—	—
16	P00222_F03	—	—	—	—	—	—	—	—	—	—	—
17	P00222_C01	—	—	—	—	—	—	—	—	—	—	—
18	P00227_D11	—	—	—	—	—	—	—	—	—	—	—
19	P00228_F03	—	—	—	—	—	—	—	—	—	—	—
20	P00229_G08	—	—	—	—	—	—	—	—	—	—	—
21	P00239_C11	—	—	—	—	—	—	—	—	—	—	—
22	P00247_A04	—	—	—	—	—	—	—	—	—	—	—
23	P00248_B04	—	—	—	—	—	—	—	—	—	—	—
24	P00249_F09	—	—	—	—	—	—	—	—	—	—	—
25	P00258_A10	—	—	—	—	—	—	—	—	—	—	—
26	P00262_C10	—	—	—	—	—	—	—	—	—	—	—
27	P00269_H08	—	—	—	—	—	—	—	—	—	—	—
28	P00628_H02	—	—	—	—	—	—	—	—	—	—	—
29	P00629_C08	—	—	—	—	—	—	—	—	—	—	—
30	P00641_G11	—	—	—	—	—	—	—	—	—	—	—
31	P00648_E12	—	—	—	—	—	—	—	—	—	—	—
32	P00697_C03	—	—	—	—	—	—	—	—	—	—	—
33	P00339_G04	—	—	—	—	—	—	—	—	—	—	—

Seq ID	Clone ID	PCT	Seq	Kidney				Heart				Spt
				Hyp	2w	4w	12w	Hyp	2w	4w	12w	
34	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
35	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
36	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
37	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
38	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
39	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
40	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
41	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
42	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
43	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
44	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
45	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
46	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
47	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
48	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
49	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
50	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
51	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
52	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
53	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
54	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
55	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
56	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
57	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
58	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
59	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
60	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
61	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
62	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
63	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
64	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
65	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
66	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
67	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
68	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
69	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
70	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
71	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
72	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
73	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
74	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
75	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
76	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
77	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
78	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
79	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
80	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
81	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
82	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
83	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
84	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
85	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
86	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
87	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
88	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
89	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
90	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
91	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
92	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
93	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
94	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
95	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
96	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
97	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
98	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
99	P00339_G04	—	—	—	—	—	—	—	—	—	—	—
100	P00339_G04	—	—	—	—	—	—	—	—	—	—	—

(57) Abstract: The invention concerns new secreted factors encoded by clones P00184 D11 (SEQ ID NO:1), P00185 D11 (SEQ ID NO:3), P00188 D12 (SEQ ID NO:5), P00188 E01 (SEQ ID NO:7), P00194 G01 (SEQ ID NO:9), P00194 G05 (SEQ ID NO:11), P00194 H10 (SEQ ID NO:13), P00199 D08 (SEQ ID NO:15), P00203 D04 (SEQ ID NO:17), P00203 E06 (SEQ ID NO:19), P00209 F06 (SEQ ID NO:21), P00219 D02 (SEQ ID NO:23), P00219 F06 (SEQ ID NO:25), P00220 H05 (SEQ ID NO:27), P00222 G03 (SEQ ID NO:29), P00225 C01 (SEQ ID NO:32), P00227 D11 (SEQ ID NO:34), P00228 F03 (SEQ ID NO:36), P00233 H08 (SEQ ID NO:38), P00235 G08 (SEQ ID NO:40), P00239 C11 (SEQ ID NO:42), P00240 E05 (SEQ ID NO:45), P00247 A04 (SEQ ID NO:50), P00248 B04 (SEQ ID NO:52), P00249 F09 (SEQ ID NO:54), P00258 A10 (SEQ ID NO:56), P00262 C10 (SEQ ID NO:58), P00269 H08 (SEQ ID NO:62), P00628 H02 (SEQ ID NO:66), P00629 C08 (SEQ ID NO:68), P00641 G11 (SEQ ID NO:71), P00648 E12 (SEQ ID NO:73), P00697 C03 (SEQ ID NO:75), and other mammalian homologues and variants of such factor, as well as polynucleotides encoding them. The invention further concerns methods and means for producing such factors and their use in the diagnosis and treatment of various cardiac, renal or inflammatory diseases.

patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

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CLAIMS:

1. An isolated nucleic acid molecule comprising a poly- or oligonucleotide selected from the group consisting of:

(a) a polynucleotide encoding a polypeptide having at least about 80% sequence identity with any amino acid sequence selected from the group consisting of: amino acids 1 to 193 of SEQ ID NO: 4, amino acids 1 to 236 of SEQ ID NO:6, amino acids 1 to 61 of SEQ ID NO: 8, amino acids 1 to 92 of SEQ ID NO:12, amino acids 1 to 86 of SEQ ID NO:14, amino acids 1 to 36 of SEQ ID NO:16, amino acids 1 to 83 of SEQ ID NO:18, amino acids 1 to 82 of SEQ ID NO:20, amino acids 1 to 462 of SEQ ID NO:22, amino acids 1 to 170 of SEQ ID NO:24, amino acids -26 to 233 of Fig. 13 (amino acids 1 to 259 of SEQ ID NO: 26), amino acids 1 to 30 of SEQ ID NO:28, amino acids 1 to 30 of SEQ ID NO:35, amino acids 1 to 100 of SEQ ID NO:37, amino acids 1 to 65 of SEQ ID NO:39, amino acids 1 to 46 of SEQ ID NO:43, amino acids 1 to 313 of SEQ ID NO:46, amino acids 1 to 58 of SEQ ID NO:51, amino acids -35 to 387 of Fig. 29 (amino acids 1 to 422 of SEQ ID NO: 53), amino acids 1 to 58 of SEQ ID NO:55, amino acids 1 to 52 of SEQ ID NO:57, amino acids 1 to 245 of SEQ ID NO:59, amino acids 1 to 142 of SEQ ID NO:63, amino acids 1 to 49 of SEQ ID NO:67, amino acids 1 to 70 of SEQ ID NO:69, amino acids 1 to 113 of SEQ ID NO: 72, and amino acids 1 to 97 of SEQ ID NO:76; or a transmembrane domain (membrane spanning segment/region) deleted or inactivated variant thereof;

(b) a polynucleotide encoding a polypeptide of amino acids 1 to 233 of SEQ ID NO: 26, or amino acids 1 to 387 of SEQ ID NO: 53;

(c) a polynucleotide encoding amino acids 1 to 203 of SEQ ID NO: 2, amino acids 1 to 193 of SEQ ID NO: 4, amino acids 1 to 236 of SEQ ID NO:6, amino acids 1 to 61 of SEQ ID NO: 8, amino acids 1 to 79 of SEQ ID NO:10, amino acids 1 to 92 of SEQ ID NO:12, amino acids 1 to 86 of SEQ ID NO:14, amino acids 1 to 36 of SEQ ID NO:16, amino acids 1 to 83 of SEQ ID NO:18, amino acids 1 to 82 of SEQ ID NO:20, amino acids 1 to 462 of SEQ ID NO:22, amino acids 1 to 170 of SEQ ID NO:24, amino acids -26 to 233 of Fig. 13 (amino acids 1 to 259 of SEQ ID NO:26), amino acids 1 to 30 of SEQ ID NO:28, amino acids 1 to 39 of SEQ ID NO:30, amino acids 1 to 541 of SEQ ID NO: 33, amino acids 1 to 30 of SEQ ID NO:35, amino acids 1 to 100 of SEQ ID NO:37, amino acids 1 to 65 of SEQ ID NO:39, amino acids 1 to 42 of SEQ ID NO:41, amino acids 1 to 46 of SEQ ID NO:43, amino acids 1 to 313 of SEQ ID NO:46, amino acids 1 to 58 of SEQ ID NO:51, amino acids -35 to 387 of Fig. 29 (amino acids 1 to 422 of SEQ ID NO:53), amino acids 1 to 58 of SEQ ID NO:55, amino acids 1 to 52 of SEQ ID NO:57, amino acids 1 to 245 of SEQ ID NO:59, amino acids 1 to 142 of SEQ ID NO:63, amino acids 1 to 49 of SEQ ID NO:67, amino acids 1 to 70 of SEQ ID NO:69, amino acids 1 to 113 of SEQ ID NO: 72, and amino acids 1 to 114 of SEQ ID NO:74, and amino acids 1 to 97 of SEQ ID NO:76; or a transmembrane domain (membrane spanning segment/region) deleted or inactivated variant thereof.

(d) a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 1, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00184_D11 (SEQ ID NO: 1), a polynucleotide hybridizing

under stringent conditions with the complement of the coding region of SEQ ID NO: 3, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00185_D11 (SEQ ID NO: 3); a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 5, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00188_D12 (SEQ ID NO: 5), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 7, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00188_E01 (SEQ ID NO: 7), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 9, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00194_G01 (SEQ ID NO: 9), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 11, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00194_G05 (SEQ ID NO: 11), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 13, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00194_H10 (SEQ ID NO: 13), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 15, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00199_D08 (SEQ ID NO: 15), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 17, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00203_D04 (SEQ ID NO: 17), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 19, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00203_E06 (SEQ ID NO: 19), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 21, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00209_F06 (SEQ ID NO: 21), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 23, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00219_D02 (SEQ ID NO: 23), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 25, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00219_F06 (SEQ ID NO: 25), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 27, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00220_H05 (SEQ ID NO: 27), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 29, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00222_G03 (SEQ ID NO: 29),

a polynucleotide hybridizing under stringent conditions with the complement of the polynucleotide of SEQ ID NO: 31 (clone P00223_F07), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 32, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00225_C01 (SEQ ID NO: 32),

5 a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 34, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00227_D11 (SEQ ID NO: 34), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 36, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by

10 clone P00228_F03 (SEQ ID NO: 36), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 38, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00233_H08 (SEQ ID NO: 38), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 40, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the

15 polypeptide encoded by clone P00235_G08 (SEQ ID NO: 40), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 42, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00239_C11 (SEQ ID NO: 42), a polynucleotide hybridizing under stringent conditions with the complement of the polynucleotide of SEQ ID NO: 44 (clone P00240_B04), a polynucleotide hybridizing

20 under stringent conditions with the complement of the coding region of SEQ ID NO: 45, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00240_E05 (SEQ ID NO: 45), a polynucleotide hybridizing under stringent conditions with the complement of the polynucleotide of SEQ ID NO: 47 (clone P00241_E12), a polynucleotide hybridizing under stringent conditions with the complement of the polynucleotide of SEQ ID NO: 48 (clone

25 P00245_D06), a polynucleotide hybridizing under stringent conditions with the complement of the polynucleotide of SEQ ID NO: 49 (clone P00246_D12), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 50, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00247_A04 (SEQ ID NO: 50), a polynucleotide hybridizing under stringent conditions with the

30 complement of the coding region of SEQ ID NO: 52, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00248_B04 (SEQ ID NO: 52), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 54, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00249_F09 (SEQ ID NO: 54), a polynucleotide hybridizing under stringent

35 conditions with the complement of the coding region of SEQ ID NO: 56, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00258_A10 (SEQ ID NO: 56), a polynucleotide hybridizing under stringent conditions with the

complement of the coding region of SEQ ID NO: 58, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00262_C10 (SEQ ID NO: 58), a polynucleotide hybridizing under stringent conditions with the complement of the polynucleotide of SEQ ID NO: 60 (clone P00263_G06), a polynucleotide hybridizing under stringent conditions with the complement of the polynucleotide of SEQ ID NO: 61 (clone P00267_F08), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 62, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00269_H08 (SEQ ID NO: 62), a polynucleotide hybridizing under stringent conditions with the complement of the polynucleotide of SEQ ID NO: 64 (clone P00312_C04), a polynucleotide hybridizing under stringent conditions with the complement of the polynucleotide of SEQ ID NO: 65 (clone P00324_H02), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 66, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00628_H02 (SEQ ID NO: 66), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 68, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00629_C08 (SEQ ID NO: 68), a polynucleotide hybridizing under stringent conditions with the complement of the polynucleotide of SEQ ID NO: 70 (clone P00634_G11), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 71, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00641_G11 (SEQ ID NO: 71), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 73, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00648_E12 (SEQ ID NO: 73), a polynucleotide hybridizing under stringent conditions with the complement of the coding region of SEQ ID NO: 75, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00697_C03 (SEQ ID NO: 75);

(e) a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 148 of SEQ ID NO: 2, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00184_D11 (SEQ ID NO: 1), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 193 of SEQ ID NO: 4, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00185_D11 (SEQ ID NO: 3); a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 236 of SEQ ID NO: 6, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00188_D12 (SEQ ID NO: 5), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 61 of SEQ ID NO: 8, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00188_E01 (SEQ ID NO: 7), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 79 of SEQ ID NO: 10, wherein said polynucleotide encodes

a polypeptide having at least one biological activity of the polypeptide encoded by clone P00194_G01 (SEQ ID NO: 9), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 92 of SEQ ID NO: 12, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00194_G05 (SEQ ID NO: 11), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 86 of SEQ ID NO: 14, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00194_H10 (SEQ ID NO: 13), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 36 of SEQ ID NO: 16, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00199_D08 (SEQ ID NO: 15), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 83 of SEQ ID NO: 18, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00203_D04 (SEQ ID NO: 17), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 82 of SEQ ID NO: 20, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00203_E06 (SEQ ID NO: 19), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 462 of SEQ ID NO: 22, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00209_F06 (SEQ ID NO: 21), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 170 of SEQ ID NO: 24, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00219_D02 (SEQ ID NO: 23), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids -26 to 233 of Fig. 13 (amino acids 1 to 259 of SEQ ID NO: 26), wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00219_F06 (SEQ ID NO: 25), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 30 of SEQ ID NO: 28, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00220_H05 (SEQ ID NO: 27), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 39 of SEQ ID NO: 30, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00222_G03 (SEQ ID NO: 29), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 541 of SEQ ID NO: 33, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00225_C01 (SEQ ID NO: 32), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 30 of SEQ ID NO: 35, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00227_D11 (SEQ ID NO: 34), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 100 of SEQ ID NO: 37, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00228_F03 (SEQ ID NO: 36), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 65 of SEQ ID NO: 39, wherein said polynucleotide encodes

a polypeptide having at least one biological activity of the polypeptide encoded by clone P00233_H08 (SEQ ID NO: 38), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 41 of SEQ ID NO: 39, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00235_G08 (SEQ ID NO: 40), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 46 of SEQ ID NO: 43, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00239_C11 (SEQ ID NO: 42), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 313 of SEQ ID NO: 46, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00240_E05 (SEQ ID NO: 45), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 58 of SEQ ID NO: 51, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00247_A04 (SEQ ID NO: 50), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids -35 to 387 of Fig. 29 (amino acids 1 to 422 of SEQ ID NO: 53), wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00248_B04 (SEQ ID NO: 52), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 58 of SEQ ID NO: 55, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00249_F09 (SEQ ID NO: 54), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 52 of SEQ ID NO: 57, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00258_A10 (SEQ ID NO: 56), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 245 of SEQ ID NO: 59, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00262_C10 (SEQ ID NO: 58), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 142 of SEQ ID NO: 63, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00269_H08 (SEQ ID NO: 62), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 49 of SEQ ID NO: 67, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00628_H02 (SEQ ID NO: 66), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 70 of SEQ ID NO: 69, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00629_C08 (SEQ ID NO: 68), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 113 of SEQ ID NO: 72, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00641_G11 (SEQ ID NO: 71), a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 114 of SEQ ID NO: 74, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00648_E12 (SEQ ID NO: 73), a polynucleotide encoding at least about 50 contiguous amino acids

from amino acids 1 to 97 of SEQ ID NO: 76, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00697_C03 (SEQ ID NO: 75);

(f) a polynucleotide encoding at least about 50 contiguous amino acids from amino acids 1 to 23 of SEQ ID NO: 26, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00219_F06 (SEQ ID NO: 25) or amino acids 1 to 387 of SEQ ID NO: 53, wherein said polynucleotide encodes a polypeptide having at least one biological activity of the polypeptide encoded by clone P00248_B04 (SEQ ID NO: 52);

(g) a polynucleotide of SEQ ID NOS:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 32, 34, 36, 38, 40, 42, 44, 45, 47, 48, 49, 50, 52, 54, 56, 58, 60, 61, 62, 64, 65, 66, 68, 70, 71, 73, and 75;

(h) the complement of a polynucleotide of (a) – (g); and

(i) an antisense oligonucleotide capable of hybridizing with, and inhibiting the translation of, the mRNA encoded by a gene encoding a polypeptide of SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 33, 35, 37, 39, 41, 43, 46, 51, 53, 55, 57, 59, 63, 67, 69, 72, 74, 76, or another mammalian homologue thereof.

2. The polynucleotide of claim 1 encoding a polypeptide comprising amino acids 1 to 233 of SEQ ID NO: 26, amino acids 1 to 387 of SEQ ID NO: 53.

3. The polynucleotide of claim 1 comprising the sequence selected from the group consisting of SEQ ID NOS:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 32, 34, 36, 38, 40, 42, 44, 45, 47, 48, 49, 50, 52, 54, 56, 58, 60, 61, 62, 64, 65, 66, 68, 70, 71, 73, and 75.

4. A vector comprising and capable of expressing a poly- or oligonucleotide of claim 1.

5. A recombinant host cell transformed with nucleic acid comprising a poly- or oligonucleotide of claim 1.

6. A recombinant host cell transformed with the vector of claim 5.

7. A method for producing a polypeptide comprising culturing a recombinant host cell transformed with nucleic acid comprising any of the polynucleotides of claim 1(a) – (g) under conditions such that the polypeptide is expressed, and isolating the polypeptide.

8. A polypeptide comprising:

(a) a polypeptide having at least about 80% identity with amino acids selected from the group consisting of: amino acids 1 to 193 of SEQ ID NO: 4, amino acids 1 to 236 of SEQ ID NO:6, amino acids 1 to 61 of SEQ ID NO: 8, amino acids 1 to 92 of SEQ ID NO:12, amino acids 1 to 86 of SEQ ID NO:14, amino acids 1 to 36 of SEQ ID NO:16, amino acids 1 to 83 of SEQ ID NO:18, amino acids 1 to 82 of SEQ ID NO:20, amino acids 1 to 462 of SEQ ID NO:22, amino acids 1 to 170 of SEQ ID NO:24, amino acids 1 to 30 of SEQ ID NO:28, amino acids 1 to 30 of SEQ ID NO: 35, amino acids 1 to 100 of SEQ ID NO:37, amino acids 1 to 65 of SEQ ID NO:39, amino acids 1 to 46 of SEQ ID NO:43, amino acids 1 to 313 of SEQ ID NO:46, amino acids 1 to 58 of SEQ ID NO:51, amino acids 1 to 58 of SEQ ID NO:55, amino acids 1 to 52 of SEQ ID NO:57, amino acids 1 to 245 of SEQ ID NO:59, amino acids 1 to 142 of SEQ ID NO:63,

amino acids 1 to 49 of SEQ ID NO:67, amino acids 1 to 70 of SEQ ID NO:69, amino acids 1 to 113 of SEQ ID NO:72, and amino acids 1 to 97 of SEQ ID NO:76; or

(b) a polypeptide encoded by nucleic acid hybridizing under stringent conditions with the complement of the coding region selected from the group consisting of: SEQ ID NOS:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 32, 34, 36, 38, 40, 42, 44, 45, 47, 48, 49, 50, 52, 54, 56, 58, 60, 61, 62, 64, 65, 66, 68, 70, 71, 73, and 75;

(c) the polypeptides of (a) and (b) having at least one biological activity of the polypeptide encoded by clones P00184_D11 (SEQ ID NO:1), P00185_D11(SEQ ID NO:3), P00188_D12 (SEQ ID NO:5), P00188_E01 (SEQ ID NO:7), P00194_G01 (SEQ ID NO:9), P00194_G05 (SEQ ID NO:11), P00194_H10 (SEQ ID NO:13), P00199_D08 (SEQ ID NO:15), P00203_D04 (SEQ ID NO:17), P00203_E06 (SEQ ID NO:19), P00209_F06 (SEQ ID NO:21), P00219_D02 (SEQ ID NO:23), P00219_F06 (SEQ ID NO:25), P00220_H05 (SEQ ID NO:27), P00222_G03 (SEQ ID NO:29), P00225_C01 (SEQ ID NO:32), P00227_D11 (SEQ ID NO:34), P00228_F03 (SEQ ID NO:36), P00233_H08 (SEQ ID NO:38), P00235_G08 (SEQ ID NO:40), P00239_C11 (SEQ ID NO:42), P00240_E05 (SEQ ID NO:45), P00247_A04 (SEQ ID NO:50), P00248_B04 (SEQ ID NO:52), P00249_F09 (SEQ ID NO:54), P00258_A10 (SEQ ID NO:56), P00262_C10 (SEQ ID NO:58), P00269_H08 (SEQ ID NO:62), P00628_H02 (SEQ ID NO:66), P00629_C08 (SEQ ID NO:68), P00641_G11 (SEQ ID NO:71), P00648_E12 (SEQ ID NO:73), P00697_C03 (SEQ ID NO:75).

9. A composition comprising a polypeptide which comprises:

(a) a polypeptide having at least about 80% identity with amino acids selected from the group consisting of: amino acids 1 to 193 of SEQ ID NO: 4, amino acids 1 to 236 of SEQ ID NO:6, amino acids 1 to 61 of SEQ ID NO: 8, amino acids 1 to 92 of SEQ ID NO:12, amino acids 1 to 86 of SEQ ID NO:14, amino acids 1 to 36 of SEQ ID NO:16, amino acids 1 to 83 of SEQ ID NO:18, amino acids 1 to 82 of SEQ ID NO:20, amino acids 1 to 462 of SEQ ID NO:22, amino acids 1 to 170 of SEQ ID NO:24, amino acids 1 to 30 of SEQ ID NO:28, amino acids 1 to 30 of SEQ ID NO: 35, amino acids 1 to 100 of SEQ ID NO:37, amino acids 1 to 65 of SEQ ID NO:39, amino acids 1 to 46 of SEQ ID NO:43, amino acids 1 to 313 of SEQ ID NO:46, amino acids 1 to 58 of SEQ ID NO:51, amino acids 1 to 58 of SEQ ID NO:55, amino acids 1 to 52 of SEQ ID NO:57, amino acids 1 to 245 of SEQ ID NO:59, amino acids 1 to 142 of SEQ ID NO:63, amino acids 1 to 49 of SEQ ID NO:67, amino acids 1 to 70 of SEQ ID NO:69, amino acids 1 to 113 of SEQ ID NO:72, and amino acids 1 to 97 of SEQ ID NO:76; or

(b) a polypeptide encoded by nucleic acid hybridizing under stringent conditions with the complement of the coding region selected from the group consisting of: SEQ ID NOS:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 32, 34, 36, 38, 40, 42, 44, 45, 47, 48, 49, 50, 52, 54, 56, 58, 60, 61, 62, 64, 65, 66, 68, 70, 71, 73, and 75; wherein the polypeptides of (a) and (b) have at least one biological activity of the polypeptide respectively encoded by clones P00184_D11 (SEQ ID NO:1), P00185_D11(SEQ ID NO:3), P00188_D12 (SEQ ID NO:5), P00188_E01 (SEQ ID NO:7), P00194_G01 (SEQ ID NO:9), P00194_G05 (SEQ ID NO:11), P00194_H10 (SEQ ID NO:13), P00199_D08 (SEQ ID

NO:15), P00203_D04 (SEQ ID NO:17), P00203_E06 (SEQ ID NO:19), P00209_F06 (SEQ ID NO:21), P00219_D02 (SEQ ID NO:23), P00219_F06 (SEQ ID NO:25), P00220_H05 (SEQ ID NO:27), P00222_G03 (SEQ ID NO:29), P00225_C01 (SEQ ID NO:32), P00227_D11 (SEQ ID NO:34), P00228_F03 (SEQ ID NO:36), P00233_H08 (SEQ ID NO:38), P00235_G08 (SEQ ID NO:40),
 5 P00239_C11 (SEQ ID NO:42), P00240_E05 (SEQ ID NO:45), P00247_A04 (SEQ ID NO:50), P00248_B04 (SEQ ID NO:52), P00249_F09 (SEQ ID NO:54), P00258_A10 (SEQ ID NO:56), P00262_C10 (SEQ ID NO:58), P00269_H08 (SEQ ID NO:62), P00628_H02 (SEQ ID NO:66), P00629_C08 (SEQ ID NO:68), P00641_G11 (SEQ ID NO:71), P00648_E12 (SEQ ID NO:73), and P00697_C03 (SEQ ID NO:75), in admixture with a carrier.

10 10. The composition of claim 9 which is a pharmaceutical composition comprising an effective amount of said polypeptide in admixture with a pharmaceutically acceptable carrier.

11. An antibody specifically binding a polypeptide of claim 8.

12. A composition comprising an antibody of claim 11 in admixture with a carrier.

13. The composition of claim 9 which is a pharmaceutical composition comprising an effective
 15 amount of said antibody in admixture with a pharmaceutically acceptable carrier.

14. A composition comprising an antagonist or an agonist of a polypeptide of claim 8.

15. The composition of claim 11 which is a pharmaceutical composition comprising an effective amount of said antagonist or said agonist in combination with a pharmaceutically acceptable carrier.

16. A method for the treatment of a cardiac, renal or inflammatory disease, comprising administering
 20 to a patient in need an effective amount of a polypeptide of claim 8, or an antagonist or agonist thereof.

17. A method for the treatment of a cardiac, renal or inflammatory disease, comprising administering to a patient in need an effective amount of an antibody specifically binding to a polypeptide of the present invention.

18. A method for screening a subject for a cardiac, renal or inflammatory disease characterized by the
 25 differential expression of the polypeptide selected from the group consisting of: SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 33, 35, 37, 39, 41, 43, 46, 51, 53, 55, 57, 59, 63, 67, 69, 72, 74, and 76, or an endogenous homologue thereof, comprising the steps of:

measuring the expression in the subject of said polypeptide or said endogenous homologue; and

30 determining the relative expression of said polypeptide or said endogenous homologue in the subject compared to its expression in normal subjects, or compared to its expression in the same subject at an earlier stage of development of the cardiac, renal or inflammatory disease.

19. The method of claim 15 wherein said subject is human and said endogenous homologue is a human homologue of the rat protein selected from the group consisting of: SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 33, 35, 37, 39, 41, 43, 46, 51, 53, 55, 57, 59, 63, 67, 69, 72, 74, and
 35 76.

20. An array comprising one or more oligonucleotides complementary to reference RNA or

DNA encoding a protein selected from the group consisting of: SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 33, 35, 37, 39, 41, 43, 46, 51, 53, 55, 57, 59, 63, 67, 69, 72, 74, and 76, or another mammalian (e.g. human) homologue thereof, where the reference DNA or RNA sequences are obtained from both a biological sample from a normal subject and a biological sample from a subject exhibiting a cardiac, renal, or inflammatory disease, or from biological samples taken at different stages of a cardiac, renal, or inflammatory disease.

21. A method for detecting cardiac, kidney, or inflammatory disease in a human test patient comprising the steps of:

providing an array of oligonucleotides at known locations on a substrate, which array comprises oligonucleotides complementary to reference DNA or RNA sequences encoding a human homologue of the protein selected from the group consisting of: SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 33, 35, 37, 39, 41, 43, 46, 51, 53, 55, 57, 59, 63, 67, 69, 72, 74, and 76 where the reference DNA or RNA sequences are obtained from both a biological sample from a normal patient and a biological sample from a patient potentially exhibiting cardiac, renal, or inflammatory disease, or from a test patient exhibiting cardiac, renal, or inflammatory disease, taken at different stages of such disease;

exposing the array, under hybridization conditions, to a first sample of cDNA probes constructed from mRNA obtained from a biological sample from a corresponding biological sample of a normal patient or from a test patient at a certain stage of the disease;

exposing the array, under hybridization conditions, to a second sample of cDNA probes constructed from mRNA obtained from a biological sample obtained from the test;

quantifying any hybridization between the first sample of cDNA probes and the second sample of cDNA probes with the oligonucleotide probes on the array; and

determining the relative expression of genes encoding the human homologue of a protein selected from the group consisting of: SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 33, 35, 37, 39, 41, 43, 46, 51, 53, 55, 57, 59, 63, 67, 69, 72, 74, and 76 in the biological samples from the normal patient and the test patient, or in the biological samples taken from the test patient at different stages of the disease.

22. A diagnostic kit for the detection of a cardiac, kidney or inflammatory disease comprising an array of claim 20.

23. The diagnostic kit of claim 22 further comprising at least one of the following components:

(a) an oligonucleotide probe;

(b) a PCR reagent;

(c) a detectable label;

(d) a biological sample taken from a human subject; and

(e) an antibody to a polypeptide of any one of the sequences selected from the group consisting of: SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 33, 35, 37, 39, 41, 43, 46, 51, 53, 55, 57, 59, 63, 67, 69, 72, 74, 76, and a further mammalian homologue thereof.

24. The diagnostic kit of claim 22 wherein said biological sample is from blood or a tissue.

5 25. The diagnostic kit of claim 21 wherein said tissue is a cardiac tissue.

26. The diagnostic kit of claim 22 wherein said cardiac tissue is a left ventricular tissue.

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FIGURE 38

5	tctagcgaac	cccttcgtag	aactaggagc	cagtgttgac	cacggtcggt	ggctggatac	60
	cccactgcat	gctgcagcaa	ggcagtcag	tgtggaggtc	atcaatctgc	tcactgagta	120
	tggggctaac	ctgaaactca	gaaactcgca	gggcaaaagt	gctcttgagc	tcgctgctcc	180
	caaaagtagt	gtggagcagg	cactcctgct	ccatgaaggt	ccacctgctc	tttctcagct	240
10	ctgccgcttg	tgtgtccgga	agtgcctggg	ccgcac atg	tca tca agc	cat cta	294
			Met	Ser Ser Ser	His	Leu	
			1		5		
	cgc act agg	tct gcc aga	acc cct gga	aaa att cct	ctt ata cca	ata	342
15	Arg Thr Arg	Ser Ala Arg	Thr Pro Gly	Lys Ile Pro	Leu Ile Pro	Ile	
		10		15		20	
	gtt gga aac	atg ttg cct	gct gta gga	cac tta ata	tac aca ttc	agt	390
	Val Gly Asn	Met Leu Pro	Ala Val Gly	His Leu Ile	Tyr Thr Phe	Ser	
		25		30		35	
20	ggc tta acc	cac tat cct	aaa aat ctg	ctt acc taa	ttagaataaa		436
	Gly Leu Thr	His Tyr Pro	Lys Asn Leu	Leu Thr *			
		40		45			
25	gccttcataa	atccaaatac	ttgcgttgaa	caaactcctg	gttaggttaa	tggntgccaa	496
	gagataacca	gaaacctttc	aagtttttaa	ctcttggtaa	tttaaaatca	aactgaaata	556
	gatggaaaat	aataatctat	ttttggataa	ttcaaggacc	cttcagtatc	tggggctggg	616
	gtccgcattt	tgnatactgg	atagacacac	acacaggtag	gatanggtaa	atnaactact	676
	taaagaatgg	cctgggattt	aagtcctcca	gatatttttt	aggtngnggt	ttcctaaaat	736
30	aaaattctgg	agtgccaaaa	aaaaaaaaaa	aaaaaaaaag	cgggcc		782

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